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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,728	01/21/2004	Klay Ethan Gilbert	38398/294579	3655

7590

08/14/2006

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EXAMINER
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BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/761,728	<b>Applicant(s)</b> GILBERT, KLAY ETHAN	
	<b>Examiner</b> Greg Binda	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

*Continued Examination Under 37 CFR 1.114*

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 17, 2006 has been entered.

*Drawings*

3. The replacement drawings filed July 17, 2006 are objected to as failing to comply with 37 CFR 1.84(h) because Figs. 7A and 7B are connected by projection lines.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

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renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Objections*

5. Claim 1 is objected to because its indentation is inconsistent. The indent space for item 1aiiii should be the same as that used for items 1ai and 1aii.

*Claim Rejections - 35 USC § 112*

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-4 & 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, line 6 recites the limitation "means . . . for receiving the pins". It is not clear if this means is the same as or different from the means for receiving pins recited in line 5.

*Claim Rejections - 35 USC § 102*

8. Claims 1-4, 8, 10 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Downey, US 3,798,924. Figs. 1-3 show a coupling 10 comprising:

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first and second hub assemblies 16 & 18, each comprising:

means 24, 26 for receiving a shaft;

a plurality of pins 30, each pin 30 having a length sufficient to be received substantially completely by a means 32 for receiving the pins 30; and

means 36, comprising a plurality of openings 36, for receiving the pins 30 of the other hub assembly while providing clearance therefor, thereby permitting movement of the pins 30 within the openings 36 to accommodate angular, parallel and axial misalignment of the received shafts; and

a center member 40 positioned between the first and second hub assemblies and comprising a plurality of openings 44 for receiving the pins.

Figs. 2-4 show the center member 40 comprises an elastomeric circular disc 42 with a plurality of openings 44 that are at least as great in number as the total number of pins 30 and are sized smaller than pin receiving openings 36 in the first and second hub assemblies 16, 18.

9. Claims 1-4 & 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hickman, GB 582,901. Figs. 1-3 show a coupling comprising:

first and second hub assemblies 1, 8 & 2, 9 (see also page 2, lines 107-109) each comprising:

means 8 & 9 for receiving a shaft 16 & 17;

a plurality of pins 10, each pin having a length sufficient to be received substantially completely by a means 4 for receiving the pins; and

means 3 comprising a plurality of opening 3, for receiving the pins 10 of the other hub assembly while providing clearance (see Fig. 2) therefor, thereby permitting movement of the pins within the opening 3 to accommodate angular, parallel and axial misalignment of the received shafts; and  
a center member 6 positioned between the first and second hub assemblies and comprising a plurality of openings 7 for receiving the pins.

Figs. 1-3 show the center member 6 comprises an elastomeric circular disc with a plurality of openings 7 that are at least as great in number as the total number of pins 10 and are sized smaller than pin receiving openings 3 in the first and second hub assemblies. Figs 1 & 3 show that each pin is generally cylindrically shaped and is tapered 12 at an end remote from the hub assembly which it comprises. Figs. 1 & 2 show the axis of the pin 10 of the first assembly 1, 8 is offset radially approximately sixty degrees from the axis of the pin 10 of the second assembly 2, 9.

10. Claims 1-4, 8 & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanamaru et al, US 5,035,677. Figs. 1-3 show a coupling comprising:

first and second hub assemblies 1 & 2, each comprising:

means for receiving a shaft;

a plurality of pins 4, 5, each pin having a length sufficient to be received substantially completely by a means 11, 12 & 21, 22 for receiving the pins; and

means 11, 12 & 21, 22, comprising a plurality of openings 11, 12 & 21, 22, for receiving the pins 4, 5 of the other hub assembly while providing clearance therefor,

thereby permitting movement of the pins 4, 5 within the openings 11, 12 & 21, 22 to accommodate angular, parallel and axial misalignment of the received shafts; and a center member/circular disc 3 positioned between the first and second hub assemblies and comprising a plurality of openings (see “holes” on col. 4, line 8) for receiving the pins.

*Response to Arguments*

11. Applicant's arguments filed July 17, 2006 have been fully considered but they are not persuasive.

a. Applicant argues that Downey fails to show a coupling that can accommodate axial misalignment. However, since the center member 40 is made from elastic material and since there is axial play between the bores 36 and the ends of the pins 30, the coupling can accommodate axial misalignment between the shafts 12 & 14.

b. Applicant argues that Downey fails to show pins having sufficient length to be substantially received by a means for receiving the pins. However, as noted in the rejection above, Downey clearly shows the pins 30 have sufficient length to be received in the means 32 for receiving the pins.

c. Applicant argues that in Downey any axial misalignment would cause the pins 30 to move out of the openings 36. However, the coupling could accommodate at least some axial misalignment without the pins coming out of the openings, particularly since axial misalignment could result in the hub assemblies 16 & 18 moving closer together.

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d. Applicant argues that Hickman fails to show the hub assemblies having openings for receiving the pins. However, Hickman shows each hub assembly 1, 8 & 2, 9 with openings 3 for receiving the pins 10.

e. Applicant argues that Hickman fails to show pins having sufficient length to be substantially received by a means for receiving the pins. However, as noted in the rejection above, Hickman clearly shows the pins 10 have sufficient length to be received in either of the means 3 & 4 for receiving the pins.

f. Applicant argues that in Hickman there is no “solution” for axial misalignment because axial alignment would prevent each pin from engaging in both hub assemblies. However, there is no reason to believe that would be the case, particularly since axial misalignment could result in the hub assemblies moving closer together.

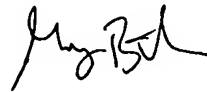
### *Conclusion*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Greg Binda  
Primary Examiner  
Art Unit 3679